

Amendments to the Specification:

Please replace the paragraph beginning at page 3, line 32 and ending at page 4, line 12 with the following amended paragraph:

Figure 1 shows an embodiment of the supporting device. In this embodiment, the supporting device is in the form of a corner shim 101. In one embodiment, the supporting device may have a Y shape. The shim 101 can be made of any material that is mechanically strong enough to support an application specific integrated circuit (ASIC) 103. Examples of the shim material include, but are not limited to, plastics, ceramics, metal, and metal alloy. Preferably, the shim 101 is made of a material with a coefficient of thermal expansion (CTE) that closely matches the CTE of the solder columns. A shim 101 with a matching CTE may be preferred in high temperature applications such as a burn-in test of semiconductor wafers and high power IC packages. In this embodiment, a shim 101 is placed at each corner of the ASIC 103. However, it is understood that the number of shims used in a particular application may vary according to the particular requirement of the application, and that the shims 101 may be placed in other depopulated areas. For example, the shims 101 may be placed along the sides of the ASIC 103, if there are depopulated areas along the side of the ASIC 103 that allow the insertion of the shim 101. Preferably, the PCB 105, ASIC 103 and shims 101 are designed to accommodate each other so that shim installation can be automated.

Please replace the "Abstract" with the following:

ABSTRACT

A method for mechanically supporting a integrated circuit (IC) package having a column grid array (CGA) interconnection with a printed circuit board (PCB) is provided by inserting a supporting device between the IC package and the PCB after the IC package is solder attached to the PCB. The supporting device is removably and mechanically fastened to the PCB and is designed in such a shape so that the supporting device cannot come into contact with the solder columns of the CGA to cause damage or shorting. This invention eliminates the maximum retention load constraint of the IC package and enables a wide variety of thermal solution implementations without comprising reliability.